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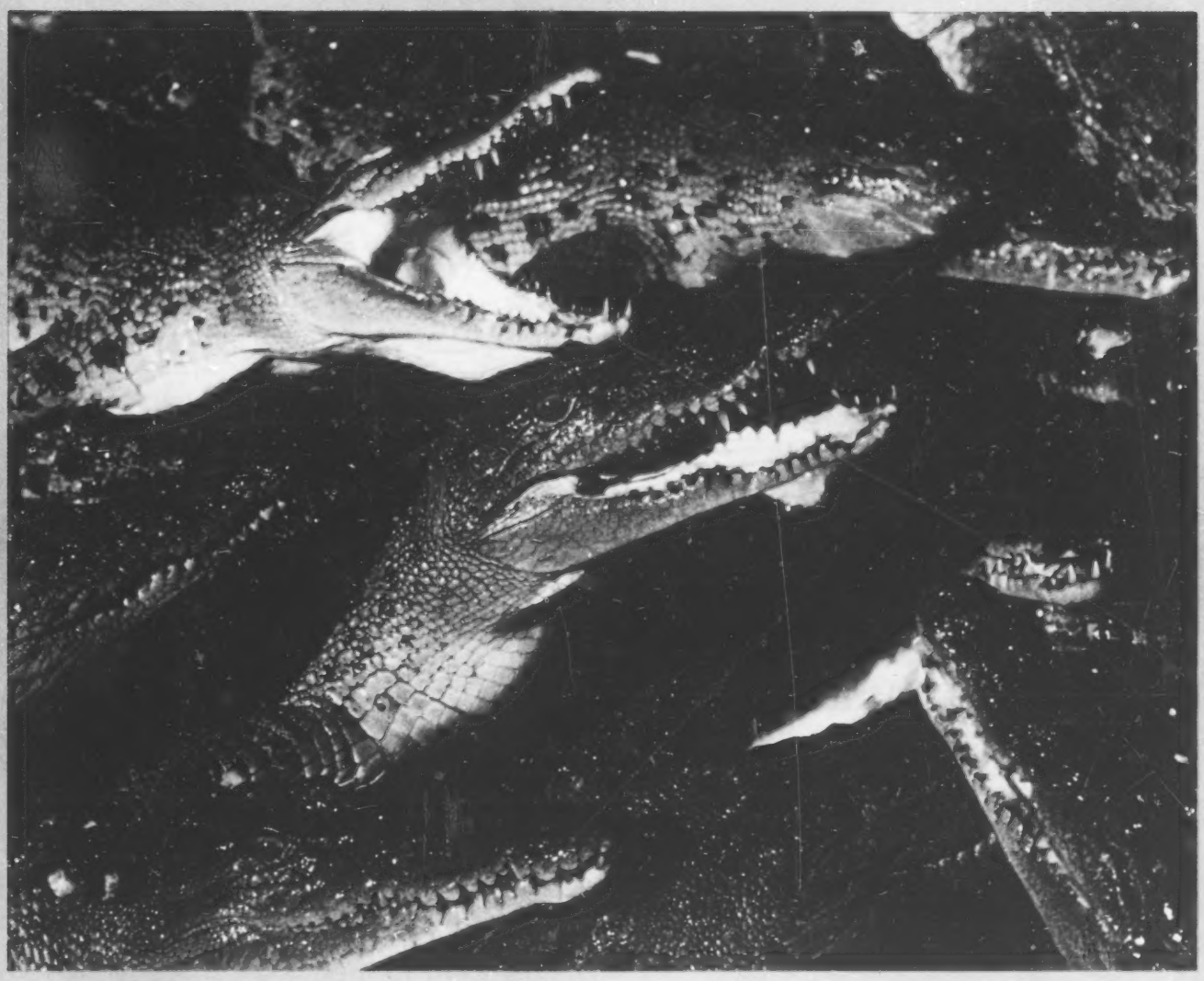

FEEDING FRENZY GRIPS CPE MARKET

Many suppliers are feeling the heat of competition on their tails

AT&T FIRES FIRST ISDN SALVOS

First services may not sway skeptics

BELL ATLANTIC FILES MESSAGING PLAN

Company plans to test pay phone voice message service

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Telephony

INTEGRATING VOICE AND DATA COMMUNICATIONS

The competitive CPE market has been thrown into a feeding frenzy by increasingly sophisticated technology and customers. Cover photo by M. Funk, The Image Bank

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Feeding frenzy grips competitive CPE market

The interconnect market is hot. The heat is not from sales, but from the competition fast on many CPE suppliers' tails. As technology becomes more advanced and customers more picky, some of those CPE providers could lose their alligator shoes

SUSAN UBIS, Staff Editor, and CZATDANA INAN, Marketing Development and Research Director

To say the customer premises equipment market is competitive would be like calling Walter Payton a "good" football player. The CPE market is *not* "competitive." It is *extremely* competitive.

Market pressure is intense. CPE suppliers feel pressured to price competitively, to provide the best and most comprehensive service, to stand out from the crowd. But there is a limit to how much pressure anything can withstand.

The CPE arena is feeling these strains. In more than a few places in the last year, companies were squeezed out of the market. The tables on the following pages, produced by *Telephony's* Market Research Department, chart the numbers behind the story.

Siemens bought Tel Plus Communications, folding it into its Information Systems group. Isoetec acquired Jarvis Corp., merged with Vodavi and bought Contel's Executone unit. BellSouth purchased Universal Communications Systems. Star Datacom Inc. picked up Henkels & McCoy/Telecom Systems. And Inter-Tel bought Interconnect Communications Corp. (See Table 1.)

Several other deals are on the table. Mitel has made an offer for RCA Telephone Systems. TIE/communications has its eye on ABI American Business Phones, while AIM Telephones has targeted Gray Communications.

Methodology

This report is based on exclusive primary research conducted by *Telephony's* Market Research Department this past March.

Each of the customer premise equipment providers was queried on sales, costs of sales, orders booked and inventory levels. In addition, the companies were asked to report their installed base of PBX and key system lines, number of employees and locations and their equipment line.

The estimates that appear in this report have been cross-checked with the companies, and in the case of the RHCs' CPE subsidiaries, with other telecom industry analysts as well as financial analysts, and are believed to be accurate within ±5% of the estimated amounts.

Piece of the Pie

Market conditions will continue to eat at many interconnects' piece of the pie. The Bell regional holding companies have made a huge dent in the market in the last two years. In 1986, the seven RHCs collectively had an estimated $1.34 billion worth of CPE sales. In 1988, they are expected to garner $1.89 billion, or almost one-fourth of an interconnect market estimated at $8 billion (Table 2). But the regionals stand on somewhat shaky ground themselves.

The RHCs are an extremely complicated lot, according to Northern Business Information analyst Francis McInerney. Pacific Telesis brought bad news to other RHCs when it joined forces with Northern Telecom to sell Meridian SL-1 and SL-100 products in California and Nevada, barely a year after it bought Northern's CPE business, he says *(Telephony, March 7, page 9).* Combined with the sale of PacTel Spectrum to IBM, Pacific Telesis is sending a signal to other RHCs of what may come *(Telephony, March 28, page 3).* It is clearly "retreating to the commodity provision of bandwidth," McInerney says.

On the other hand, BellSouth and Ameritech are "on the leading edge," as McInerney puts it. Ameritech in particular, he says, is "really trying to get beyond the business of a simple utility," most notably through its involvement with David Systems. The problem is that it does not have account management expertise and has limited capabilities, he notes.

The RHCs are in a period of retrenchment, accord-

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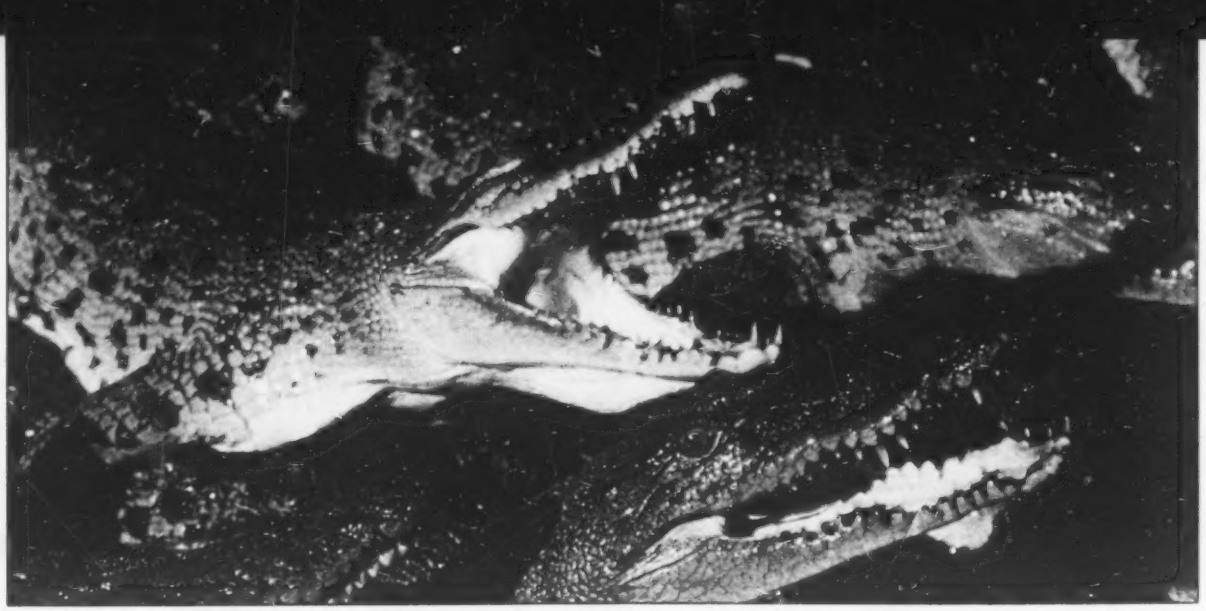


TELEPHONY'S COMPOSITE INDEX OF BUSINESS CPE PROVIDERS: ACQUISITIONS & MERGERS DURING 1986-88

	CPE Sales ($000,000) 1986	1987	1988	Acquired by:
Non-Affiliated				
Tel Plus Communications, Inc.	$ 255.0	$ 283.0	$ 320* [a]	1987 Siemens
RCA Telephone Systems	120.0	130.0	140* [b]	1988 Mitel (proposed)
Universal Communications Systems	86.9	106.0	[c]	1987 BellSouth
Norstan	68.1	96.2	86.0	
Communications Corp. of America	40.0	27.1	22.0	
Jarvis Corp.	36.0	38.0	40.0* [d]	1987 Isoetec [g]
Communications Consultants, Inc.	28.2	25.9	21.0	
ABI American Businessphones	25.5	28.1	30.0* [e]	1988 TIE (proposed)
Gray Communications	25.0	22.3	25.5 [f]	1988 AIM Telephones (proposed)
Standard Telecommunications	19.4	31.0	38.0	
Henkels & McCoy/Telecom Systems	19.0	21.0	25.5	1987 Star Datacom Inc.
	$ 723.1	$ 808.6		
Independent Affiliates				
Centel Business Systems	$ 262.0	$ 332.6	$ 375.0*	
Contel/Executone	268.0	305.0	335* [g]	1988 Isoetec/Vodavi
SNET Systems, Inc.	53.6	54.6	100.0	
Rotelcom Network Systems	76.2	72.3	56.4	
	$ 659.8	$ 764.5		
Up & Coming (and profitable)				
ATS Telephone & Data Systems	$ 14.2	$ 12.6	$ 16.4	
Communications World Int'l.	8.1	11.0	13.0	
Interconnect Communications Corp.	6.8	22.7 [h]	38.0 [h]	1987 Inter-Tel [c]
	29.1	46.3	67.4	
TOTAL	$1,412.0	$1,619.4		

* estimated by Telephony

a: now part of Siemens Information Systems, Office Systems Manufacturing

b: a subsidiary of General Electric, RCA Telephone Systems is one of the largest distributors of Mitel products

c: now part of BellSouth Enterprises, Communications Systems Group

d: Isoetec sales climbed from $62 million in 1986 to $100 million in 1987

e: proposed acquisition of ABI follows TIE's acquisition of Honeywell Communications Services Business

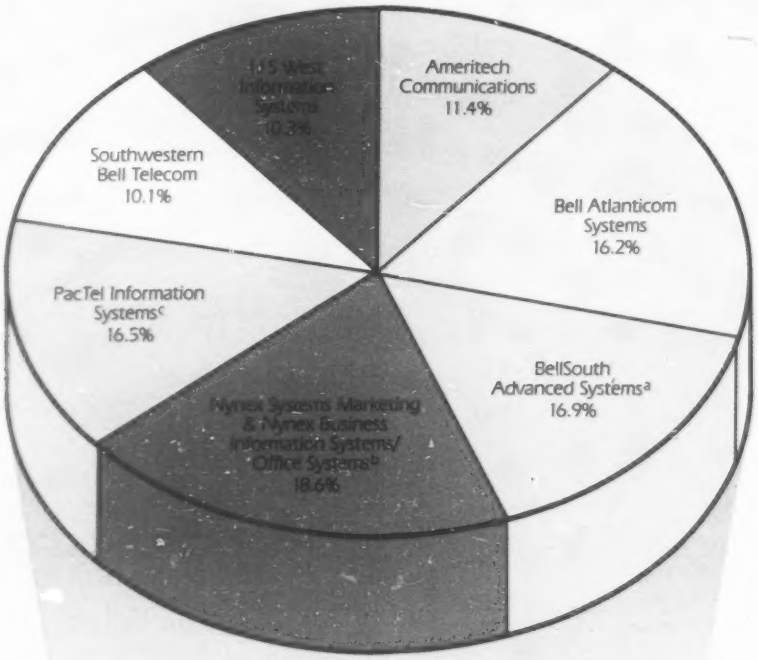
f: NEC has 10% stake in AIM Telephones with option for majority share

g: 50/50 acquisition by Vodavi Technologies and Isoetec Communications in February 1988. Vodavi moved to acquire Executone in December 1987, just prior to Vodavi/Isoetec agreement in principle to merge

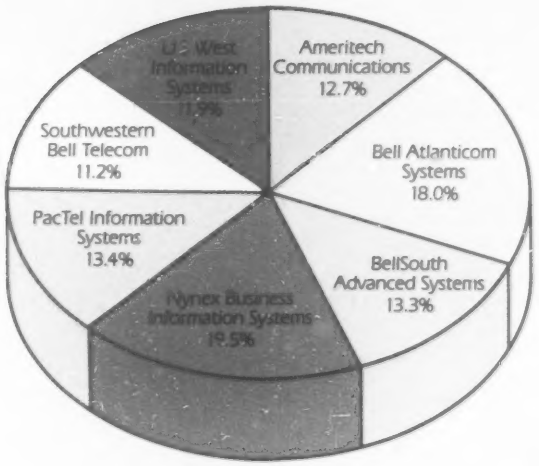
h: Inter-Tel's direct sales division (includes ICC acquisition)

REGIONALS' 1986 vs. 1988 CPE SALES*

1988: $1,883,000,000


U S West Information Systems 10.3%
Ameritech Communications 11.4%
Southwestern Bell Telecom 10.1%
Bell Atlanticom Systems 16.2%
PacTel Information Systems[c] 16.5%
BellSouth Advanced Systems[a] 16.9%
Nynex Systems Marketing & Nynex Business Information Systems/ Office Systems[b] 18.6%

1986: $1,336,000,000


U S West Information Systems 11.9%
Ameritech Communications 12.7%
Southwestern Bell Telecom 11.2%
Bell Atlanticom Systems 18.0%
PacTel Information Systems 13.4%
BellSouth Advanced Systems 13.3%
Nynex Business Information Systems 19.5%

* estimated by Telephony

a. includes Universal Communications Systems acquisition

b. assumes Manhattan-based financial houses embark on SEC recommended system upgrades

c. includes acquisition of Northern Telecom's western region Office Systems Division and PacTel Meridian Systems joint venture

Feeding frenzy *continued*

ing to Gerald Mayfield, president of DMW Enterprises. None of the Bell companies is doing well, Mayfield comments, adding that they are finding their regulated pre-tax profits are now looking very good. They're trying to compete with interconnects, but haven't been able to take advantage of their strengths, he adds. The trend may be toward third-party sales agreements involving T-1 and data, similar to the recent Bell Atlantic-Avanti deal, Mayfield concludes.

As for the market as a whole, overall consolidation will continue, according to Shearson Lehman Hutton Inc. analyst Charlie Nichols. But he adds, the bigger deals have already been made; what is left is a realignment of the smaller interconnects. The shuffling of the deck has left the Japanese holding an odd hand, he comments, in terms of how they will distribute their products in the U.S. More Japanese manufacturers will turn to the RHCs as distribution outlets, Nichols contends.

Analysts have varying views of where the interconnect industry is headed, but agree that it will be a tough road.

"Pricing pressures will remain, but they won't be as bad as the last two years," Nichols predicts. Growth will be in ancillary, adjunct products, such as voice mail, facsimile and other "non-traditional areas," he says.

Margins on PBX sales are "razor thin," says Mayfield. "The traditional market is not attractive."

The biggest problem, aside from pricing, will be the ability to provide broad-based information management services, McInerney says. Not many can offer this, he comments. The industry will likely see more niche players selling only voice-type systems and products that eliminate service calls, or what he calls the commodity end of the market.

The RHCs could benefit from an emphasis on service, Nichols says. "Centrex has done well in the last few years because it takes away the risk and hassle," he comments. What the RHCs may do is reduce their geographic reach and focus on a more local level. "The RHCs have become more realistic and more pragmatic than two years ago," Nichols adds. If they decide to stay in the market, and he thinks some may get out, they will likely focus on the kind of products that can keep close customer contact, he believes.

"There are definitely some tough years ahead for interconnects," McInerney says. "There is no easy distribution path. Distribution layers are actually imploding.

"The entire industry today is customer relations." Installation and maintenance issues are key, he says, making vertical integration less attractive. "How many companies want to run everything from R&D to sales and services?" he asks. "It just doesn't make sense anymore."

From the Horse's Mouth

CPE interconnects echo analysts' dry evaluation of the situation.

"Oversupply from manufacturers and overlap in distribution channels, as well as depressing profit margins," are key concerns, says Donald R. Mulder, Centel Business Systems vice president-marketing. Changes in the marketplace will result in a decline in revenues resulting from lower manufacturing costs and on-system sales, he adds. Higher reliability on maintenance sales and simpler configurations on other sales also will be more likely, he says.

"Delivering quality service to customers is *the* issue and will continue to be *the* issue 110 years from now," comments A. Thomas Kelly III, president of SNET Systems/SNET Diversified Group. "Conscientious and creative cost control continues to be a primary consideration in all aspects of doing business. We strive for continuing business partnerships that allow us to monitor and meet changing communications needs over the long-term growth of a business."

Market conditions will continue to eat at many interconnects' piece of the pie. The Bell regional holding companies have made a huge dent in the market in the last two years. In 1986, the seven RHCs collectively had an estimated $1.34 billion worth of CPE sales. In 1988, they are expected to garner $1.89 billion. . . .

Another key concern is the technical and financial resources of a vendor. "With margins eroding due to extreme price competitiveness, it is becoming increasingly clear that the PBX vendors that will survive are those that are stable, established and financially very sound," says H. Werner Krause, president and CEO of Siemens Information Systems and Tel Plus Communications Inc. "This is a factor that customers must consider when investing in telecommunications—will the vendor they buy from today be around to support them tomorrow. . . ? Compounding this issue is the increasing complexity of communications applications, requiring extensive pre- and post-sale support for customers."

Still another issue, Krause says, is the need for vendors to articulate the benefits of new technologies to customers. The industry as a whole has a responsibility to educate customers, he says.

That may or may not be the answer. As customers become more sophisticated, demanding more and better services, it is likely some interconnects will feel the squeeze of their alligator belts. T